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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,240	04/04/2001	Anil Kavipurapu	KAVIPURAPU I	4102
47396	7590	11/02/2005	EXAMINER	
HITT GAINES, PC AGERE SYSTEMS INC. PO BOX 832570 RICHARDSON, TX 75083			YANCHUS III, PAUL B	
			ART UNIT	PAPER NUMBER
			2116	
DATE MAILED: 11/02/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/826,240	Applicant(s) KAVIPURAPU, ANIL	
	Examiner Paul B. Yanchus	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This non-final office action is in response amendments filed on 8/18/05.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-25 and 28-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Mittal et al., US Patent no. 5,719,800 [Mittal].

Regarding claim 21, Mittal discloses a power selection system for use with a reconfigurable circuit [microprocessor, column 2, lines 14-19], comprising:

a monitoring circuit [activity monitor] configured to determine a transition rate of at least one node [functional unit] located within said reconfigurable circuit [column 5, lines 18-25]; and

a mode selection circuit [mode controller] coupled to said monitoring circuit and configured to reconfigure said reconfigurable circuit by altering a power characteristic applied to at least a portion of said reconfigurable circuit based on a comparison between said transition rate and a predetermined operating range [column 5, lines 22-30].

Regarding claim 22, Mittal further discloses a switching counter to determine the transition rate [counter, column 6, lines 13-16].

Regarding claim 23, Mittal further discloses reducing power to the functional unit [column 5, lines 25-30].

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Regarding claim 24, Mittal further discloses at least one edge detection circuit configured to determine a voltage change in said at least one node and said transition rate is based on said voltage change [counter increments when activity is detected, column 6, lines 13-19].

Regarding claim 25, Mittal further discloses using timer to employ a time period for determining a transition rate [inherent since some type of timer must be used in determining a rate of activity].

Regarding claim 28, Mittal discloses a method of operating a reconfigurable circuit comprising:

determining a transition rate of at least one node [functional unit] located within said reconfigurable circuit [column 5, lines 18-25]; and

reconfiguring said reconfigurable circuit by altering a power characteristic applied to at least a portion thereof circuit based on a comparison between said transition rate and a predetermined operating range [column 5, lines 22-30].

Regarding claim 29, Mittal further discloses aggregating a number of switching transitions associated with said node [column 6, lines 13-16].

Regarding claim 30, Mittal further discloses reducing power to the functional unit [column 5, lines 25-30].

Regarding claim 31, Mittal further discloses that the determination of the transition rate is based on a voltage change in said at least one node and said transition rate is based on said voltage change [counter increments when activity is detected, column 6, lines 13-19].

Regarding claim 32, Mittal further discloses using an interrupt timer to employ a time period for determining a transition rate [inherent since some type of timer must be used in determining a rate of activity].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26, 27 and 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mittal et al., US Patent no. 5,719,800 [Mittal].

Regarding claim 26 and 33, Mittal, as described above, discloses a power selection system for use with a reconfigurable circuit. Mittal does not specifically disclose using a sample and hold circuit and two comparators for determining whether a count value is within a range. However, sample and hold circuit and comparators systems are notoriously well known in the art to be used to determining whether a count value is within a range. It would have been obvious to one of ordinary skill in the art to include the well known sample and hold circuit and comparators system in order to determine whether the CAS* value is in a certain range.

Regarding claim 27, Mittal, as described above, discloses a power selection system for use with a reconfigurable circuit. Mittal does not disclose that the reconfigurable circuit that comprises a PRBS generator. However, reconfigurable PRBS generators are well known in the

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art. It would have been obvious to one of ordinary skill in the art to apply the power selecting method taught by Mittal to well known reconfigurable PRBS generators in order to reduce their power consumption.

Regarding claims 34-40, Mittal, as described above, discloses a power selection system for use with a reconfigurable circuit. Mittal does not disclose that the reconfigurable circuit comprises a monitored circuit with a delay element and a multiplier, such as a PRBS generator or a digital filter. However, reconfigurable PRBS generators and digital filters are well known in the art. It would have been obvious to one of ordinary skill in the art to apply the power selecting method taught by Mittal to well known reconfigurable PRBS generators and digital filters in order to reduce their power consumption.

Response to Arguments

Applicant's arguments with respect to claims 21-40 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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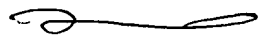
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul B. Yanchus whose telephone number is (571) 272-3678. The examiner can normally be reached on Mon-Thurs 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Yanchus
October 31, 2005


LYNNE H. BROWNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100